

**REMARKS**

The Office Action of July 15, 2005 presents the examination of claims 3, 86, and 89. Claims 3 and 86 have been canceled without prejudice or disclaimer. Claim 89 has been amended. New claims 91-92 have been added. The specification has been amended. No new matter is inserted into the application. Upon entry of this Reply, claims 89 and 91-92 will be pending.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

**Objection to the Specification**

The Examiner has objected to the specification as not complying with the sequence rules as set forth in 37 CFR 1.821-1.825. Specifically, the Examiner has noted that the specification references only SEQ ID NOs: 1-48611 but does not reference SEQ ID NOs:48612-97222.

While continuing to traverse the objections of the Examiner, Applicant has chosen to amend the specification as follows to overcome these objections: "The SEQ ID NOs of the amino acid sequences run consecutively, starting from SEQ ID NO:48612 (equivalent to protein variant number NV\_1) to SEQ ID NO:97222

(equivalent to protein variant number NV\_48611)." (added to page 3, line 16).

Briefly, the nucleotide variants and the proteins which they encode (protein splice variants) were given the same numbers in the text (see page 2, lines 20-22 for the nucleotide variants; and page 3, lines 10-15 for the protein variants). However, during the process of preparing a formal sequence listing, the numbering of the sequence identifiers needed to be changed. Therefore, the protein variant "NV\_1", which is encoded by the nucleotide variant "NV\_1" (SEQ ID NO:1), received SEQ ID NO:48612 ( $48611 + 1$ ). Such renumbering proceeded consecutively for all of the protein variant sequence identifiers, such that the last protein variant "NV\_48611" received SEQ ID NO: 97222 ( $48611 + 48611$ ).

Therefore, the amino acid sequence that was elected, SEQ ID NO:70493, is actually protein variant NV\_21882 ( $70493 - 48611$ ). This can easily be confirmed by comparing the original amino acid sequence that was submitted, with its name, and the amino acid sequence now identified as SEQ ID NO:70493. Such a comparison shows that the two sequences are identical.

**Rejection under 35 U.S.C. § 112, second paragraph (Pages 2-3 of the Office Action)**

The Examiner rejects claims 3, 86 and 89 under 35 U.S.C. § 112, second paragraph for allegedly being indefinite. While continuing to traverse these rejections, claims 3 and 86 are canceled without prejudice, thus rendering the rejection thereof moot. Applicants respectfully traverse the rejection of the pending claims. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

The Examiner asserts that these claims are confusing in referring to SEQ ID NOs: 1 to 48611, rather than only referring to the elected sequence, SEQ ID NO:70493. In order to overcome the rejection, but not to acquiesce to the Examiner's position, claim 89 has been amended to recite "an amino acid sequence depicted in SEQ ID NO:70493". Support can be found throughout the specification, particularly as described above with regard to the sequence identifiers for the amino acid sequences.

The Examiner also asserts that these claims are confusing in being directed to an amino acid sequence. In order to overcome the rejection, but not to acquiesce to the Examiner's position, claim 89 has been amended to recite "an alternative splicing variant protein".

Further assertions to the claims, while specifically traversed, have been rendered moot by canceling claims 3 and 86 without prejudice.

Applicants respectfully submit that the pending claims particularly point out and distinctly claim the present invention, and therefore fully comply with 35 U.S.C. § 112, second paragraph. Withdrawal of the instant rejection is respectfully requested.

**Rejection under 35 U.S.C. § 102(b) (Page 3 of the Office Action)**

The Examiner rejects claims 3, 86 and 89 under 35 U.S.C. § 102(b) over Hu et al. (hereinafter "Hu"). While continuing to traverse these rejections, claims 3 and 86 are canceled without prejudice, thus rendering the rejection thereof moot. Applicants respectfully traverse the rejection of the pending claims. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

The Examiner asserts that Hu discloses the amino acid sequence of two splice variants (FL-1 and FL-2) of a human hematopoietic progenitor kinase. The Examiner further asserts that SEQ ID NO:70493 matches the sequence in Figure 1A for the FL-2 variant, except for four amino acids at amino acid positions 631 and 654-656.

Applicant notes that claim 89 now recites "a protein having an amino acid sequence depicted in SEQ ID NO:70493", which amendment

was made to overcome the rejections under 35 U.S.C. § 112, second paragraph as described above. This amendment overcomes the rejection over novelty as well, because as the Examiner noted, the FL-2 variant sequence differs from that of SEQ ID NO:70493 by four amino acids. Furthermore (and without crafting a rejection), if the Examiner were to assert a rejection under 35 U.S.C. § 103 for Hu, this amendment would also overcome such a rejection, given the differences between the claimed sequence and the sequence disclosed in Hu.

#### **New Claims**

New claim 91 recites that the features of the present invention include the protein of claim 89, wherein said amino acid sequence is coded by an isolated nucleic acid sequence. Nothing in the prior art teaches or suggests such. It is submitted that this new claim distinguishes over the prior art.

New claim 92 recites that the features of the present invention include the protein of claim 91, wherein said amino acid sequence is coded by an isolated nucleic acid sequence depicted in SEQ ID NO:21882. Nothing in the prior art teaches or suggests such. It is submitted that this new claim distinguishes over the prior art.

**Conclusion**

Applicants respectfully submit that the above remarks and/or amendments fully address and overcome the outstanding rejections and objections. For the foregoing reasons, Applicants respectfully request the Examiner to withdraw all of the outstanding rejections and objections, and to issue a Notice of Allowance indicating the patentability of the present claims. Early and favorable action of the merits of the present application is thereby respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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